WHAT IS CLAIMED IS:

- 1. A preparative liquid chromatograph comprising:
- a plurality of detectors including a mass spectrometer;
- a chromatogram generator for generating a plurality of chromatograms each corresponding to each of the plurality of detectors;
 - a binary converter for converting each of the plurality of chromatograms into a respective binary signal by comparing the chromatogram with a predetermined threshold;
- a logical operator for performing a binary operation on the plurality of respective binary signals and for generating a resultant binary signal; and
 - a separation controller for controlling a fraction collector of the preparative liquid chromatograph based on the resultant binary signal to separate components from a sample.
- 2. The preparative liquid chromatograph according to claim 1, wherein the plurality of detectors include an ultraviolet-visible light spectrophotometer (UV detector) and an evaporation light scattering detector (ELSD) as well as the mass spectrometer.
- The preparative liquid chromatograph according to claim 1, wherein the binary operation performed in the logical operator is AND of all the respective binary
 signals.
 - 4. The preparative liquid chromatograph according to claim 1, wherein the binary operation performed in the logical operator is OR of all the respective binary signals.

- 5. The preparative liquid chromatograph according to claim 1, wherein the preparative liquid chromatograph further comprises:
- a shift time determiner for determining a shift time between a plurality of chromatograms; and
- a shift time canceller for canceling the shift time between the plurality of chromatograms.
 - 6. The preparative liquid chromatograph according to claim 1, wherein the preparative liquid chromatograph further comprises:
 - a shift time determiner for determining a shift time between a plurality of chromatograms; and

10

- a shift time canceller for canceling the shift time between the plurality of respective binary signals corresponding to the plurality of chromatograms.
- 7. The preparative liquid chromatograph according to claim 5, wherein the shift time determiner determines the shift time between the plurality of chromatograms by measuring a shift time between peaks of the same component contained in a standard sample.
- 8. The preparative liquid chromatograph according to claim 6, wherein the shift time determiner determines the shift time between the plurality of chromatograms by measuring a shift time between peaks of the same component contained in a standard sample.